

IN THE CLAIMS:

This listing of the claims replaces all prior versions, and listings, of the claims in the application.

1-37. (Cancelled)

38. (Currently amended) A method for a printer linked to a computing device to update microcode of said printer comprising the steps of:

receiving from said computing device one or more files across an interface suitable for conveying information to be printed by said printer, wherein at least one of said files is a print job file comprising an embedded microcode module, said module being one of a plurality of modules in said print job file;

recognizing if a received file is a print job file and if a received print job file comprises an embedded microcode module, else if a received print-job file does not include a microcode module, then normally processing said print-job file; and

writing at least one microcode module received in a print job file to a memory area in said printer indicated in said print job file,

wherein said print job file further comprises a single file header portion and a separate file data portion, and wherein presence of a microcode module in said print job file is indicated by a bit pattern in said file header portion of said print job file, wherein said module further comprises a module header and module data, wherein said module header comprises a data field for specifying a destination storage location for said module, and wherein said module header comprises a bit pattern that directs a processor in said printer to create a file specified by said data field, delete a file specified by said data field, create a directory specified by said data field, or delete a directory specified by said data field.

39-56. (Cancelled)

57. (Currently amended) An apparatus for updating microcode comprising; a computing

device comprising a program for composing and downloading a print job file;
a printer comprising a printer processor, a printer memory having stored
microcode, and a printing engine; and
an interface linking said computing device and said printer and suitable for
conveying information to be printed by said printer;
wherein said program causes said computing device
to compose a print job file having an embedded microcode module, and
to download said composed print job file to said printer across said
interface, and
wherein said microcode controls said printer to receive from said computing
device across said interface said print job file comprising an embedded microcode
module,
to recognize that said received print job file comprises an embedded
microcode module, and
to write said embedded microcode module to a memory area in said
printer indicated in said print job file, and
wherein said print job file further comprises a single print job file header and a
separate print job file data, wherein presence of a microcode module in said print job file
is indicated by a bit pattern in a header portion of said print job file, wherein said print
job file further comprises a module comprising a module header and module body,
wherein said module body comprises said microcode, and wherein said module header
comprises a data field for specifying a destination storage location for said module, and
wherein said module header comprises a bit pattern that directs said printer to create a
file specified by said data field, to delete a file specified by said data field, to create a
directory specified by said data field, or to delete a directory specified by said data field.

58-76. (Cancelled)